

Houliang Lu

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OBJECTIVE	Dedicated and motivated C.S. graduate student seeking Software Engineering internship.
EDUCATION	<p>Columbia University in the City of New York, New York, NY, USA</p> <ul style="list-style-type: none">▪ Master of Science in Computer Science Jan 2016 – May 2017(Expected)<ul style="list-style-type: none">• Cumulative GPA: N/A• Relevant coursework: Machine Learning, Analysis of Algorithms, Introduction to Database, Cloud Computing <p>Fudan University, Shanghai, China</p> <ul style="list-style-type: none">▪ Bachelor of Science in Electronic and Computer Engineering Sep 2010 – Jun 2014<ul style="list-style-type: none">• Major GPA: 3.43 / 4.00 Rank: 15%• Relevant coursework: Programming Languages(C++), Introduction to Computer System, Computer Architecture
WORK EXPERIENCE	<p>SAP, Shanghai, China</p> <ul style="list-style-type: none">▪ Software Engineer, SAP Labs Aug 2014 – Dec 2015<ul style="list-style-type: none">• Product: SAP Anywhere, which is a light-weight, mobile-first, cloud-based ERP solution. In the meanwhile, it is designed as sales-focused, extensibility-focused, UX-focused, and target to small-middle size enterprises.• Responsibility: 1. Developed the Sales Channel and Logistics related functionalities to provide a high extensibility for 3rd party sales channels and shipping carriers. 2. Developed and optimized Order Management System and Pre-Sales System from both technique and solution perspectives, which are two core module of the product. 3. Developed the infrastructures of front-end applications which allow other developers to do customization based on different business requirements. 4. Acted as the front-end development owner of my scrum team. Responsible for code review and solution analysis.
RESEARCH & PROJECTS	<p>Bookbooks - Web Application for Books Review, Columbia University</p> <ul style="list-style-type: none">▪ Course Project of Introduction to Database Jan 2016 – Present<ul style="list-style-type: none">• Project: A web application for books review and online-shopping with SNS features like following other users and wish lists, hosted on Microsoft Azure. The app is responsive-first, mobile-first.• Responsibility: 1. Designed the E/R model and database schema. 2. Designed and implemented the infrastructures of the app using PostgreSQL, Django and React. 3. Developed the web front-end UI and server-side business logic. <p>Channel Integration - Web Application for E-Commerce Management, SAP</p> <ul style="list-style-type: none">▪ Web application hosted on SAP Cloud Platform Jun 2015 – Sep 2015<ul style="list-style-type: none">• Project: Developed a web application which integrate E-Commerce channels like Amazon, Taobao into SAP Cloud ERP. The application communicates with channels and SAP Cloud ERP by OAuth 2.0 and OpenAPI. It also provides a callback mechanism to push notification to SAP Cloud ERP.• Responsibility: 1. Developed RESTful services and front-end UI using Spring framework and UI5, which is an open source MV* framework. 2. Optimized the sales order creation and sync using lazy strategy and batch push which reduces the number of HTTP requests by 80%. <p>Image Authentication, Fudan University</p> <ul style="list-style-type: none">▪ Graduation thesis Feb 2014 – Jun 2014<ul style="list-style-type: none">• Research areas: Computer Vision, Machine Learning• Project: 1. Designed an algorithm to authenticate the given image and isolate the forged areas if the image was tampered. The algorithm extracts feature vectors of images using SIFT algorithms, finds matched point pair using decision tree and calculates the Affine transformations matrix using RANSAC method to isolate the forged part. 2. Optimized the efficiency on large RGB image by grayscale transformation and image compression, which reduces the running time by 60%.
TECH SKILLS	Object-oriented programming(Java, JavaScript, C/C++, Python), Web Development(Spring, NodeJS, React), Algorithm Design and Analysis, Machine Learning(SciPy, scikit-learn), Database, Scrum
ACTIVITIES & VOLUNTEER	<p>Community Teaching Assitant, Coursera</p> <ul style="list-style-type: none">▪ Online Teaching Assistant of Algorithms: Design and Analysis, Part 1 Jan 2015 – Mar 2015<ul style="list-style-type: none">• Helped enrolled students understand lectures and programming assignments and maintain the course wiki page.